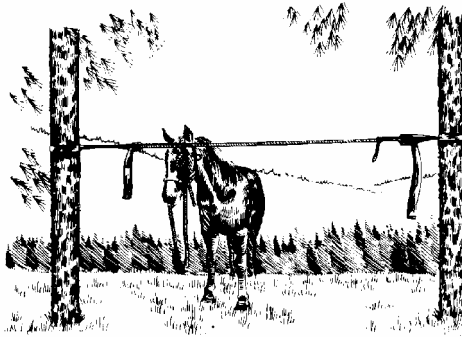


# EARLY LIVESTOCK GRAZING IN THE BLUE MOUNTAINS

Compiled by David C. Powell

June 2008

Although Marcus Whitman brought several head of cattle to the Walla Walla River valley in 1836, more substantial numbers of cattle and sheep were initially brought into northeastern Oregon and southeastern Washington during the 1840s via the Oregon Trail. Native American horse herds were already large and well established by then, having arrived in the Blue Mountains around 1730 after migrating northward from the Santa Fe, New Mexico area.



During the summer and fall of 1861, large numbers of sheep and cattle were driven into eastern Oregon and eastern Washington from the Willamette Valley of western Oregon. The winter of 1861-1862, however, was one of the most severe ever recorded for the Pacific Northwest, and it almost wiped out this fledgling livestock industry. In the spring of 1862, a Walla Walla newspaper stated that a thousand yards from town, one could almost step from one dead cow to another throughout the whole valley.

Despite this major die-off event, livestock continued to be imported, and they increased in numbers until another severe winter in 1880-1881, when at least half of the cattle in eastern Oregon and eastern Washington perished. Cattle numbers rebounded quickly but then suffered another major winter loss in 1889-1890.

At the time of Euro-American settlement, much of the Blue Mountains was covered with lush grass and other herbaceous vegetation. Forest inspector Harold Langille described rangeland conditions before they were modified by heavy livestock grazing:

“A few years ago Eastern Oregon was one of the best range sections of the West. The rich bunch grass waved knee deep on hill and plain in such close growth that it was mowed with machines for hay.”  
(*Proposed Blue Mountains Forest Reserve*, Langille, 1906)

During the late nineteenth and early twentieth centuries, immense bands of sheep also grazed in the Blue Mountains. In 1892, sheep in great numbers moved into eastern Oregon and across the Columbia River into Washington. Shepherders made an annual migration with their flocks, following the snow as it retreated from low elevations in spring to high elevations in summer, and then back down to low elevations in autumn.

Sheep grazing caused conflict between cattle ranchers, homesteaders, and sheepherders because the sheepherders were often nomadic (in contrast to ranchers and homesteaders who tended to be year-long residents), and because conventional wisdom held that sheep caused rangeland deterioration to a greater degree than cattle.

Forest inspector Harold Langille described the sheep grazing situation well in this account from his 1906 report for the Blue Mountains Forest Reserve:

“Sheep from Wasco, Crook, Sherman, Gilliam, Umatilla and Morrow Counties are driven to the mountains early each season and ranged up to the very doors of the actual settlers and cattle owners. There has been some trouble in the past resulting in bloodshed, but nothing as serious as that which threatens to come about in the near future.”

Large roving bands of sheep on the open range led to range wars between cattle and sheep operators in the early 1900s. Except for local outbursts, the open-range wars ended in spring of 1906 when the U.S. Forest Service began to regulate use of public summer range by allotting separate areas to cattle and sheep.

An early survey of sheep ranges (before 1903) found moist mountain meadows that were entirely devoid of vegetation and experiencing severe soil erosion. A complete collection of the herbaceous plants growing in a heavily grazed meadow found not a single perennial species, and no annuals exceeding two inches in height. Sheep browsing had damaged all shrubs other than snowbrush ceanothus, and even the small ponderosa pines were fed upon by sheep.

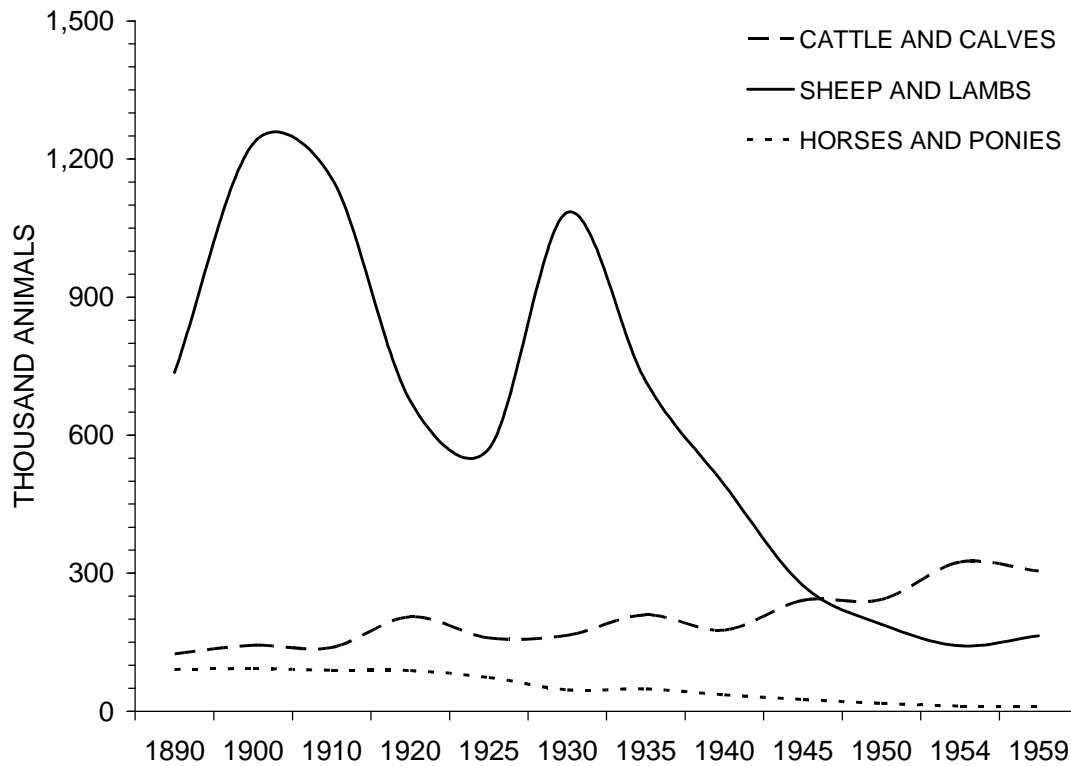
In the early twentieth century, livestock grazing had been severe enough to influence whether soil was even present or not, as described by Forest Inspector Harold Langille during his examination of the Heppner Forest Reserve in 1903:

“It was everywhere observed that upon tracts upon which there is no forest cover there is no soil. At one time these areas were covered with soil to a depth of from one to two feet, and sufficient soil binding vegetation grew upon it to resist the destructive elements – wind and water – but persistent overgrazing destroyed this cover, and, there being no tree growth to protect the soil, it rapidly disappeared, leaving nothing but a bed of exposed rocks.”

In 1905, just prior to establishment of the Wenaha Forest Reserve, the northern half of the Umatilla National Forest supported somewhere in excess of 275,000 head of grown sheep plus their increase, 40,000 head of cattle, and 15,000 head of horses. All these animals grazed annually on the area now included within the Pomeroy and Walla Walla Ranger Districts.

By the late 1930s, however, permitted livestock numbers for the entire Umatilla National Forest, comprising an area about double the size of the Wenaha Forest Reserve, had been reduced to 88,102 head of sheep and 8,528 head of cattle.

The following figure shows historical grazing trends for three classes of livestock (cattle and calves, sheep and lambs, horses and ponies) for nine counties in northeastern Oregon and southeastern Washington. It illustrates that sheep numbers were substantially higher than cattle or horse numbers until the mid 1940s.



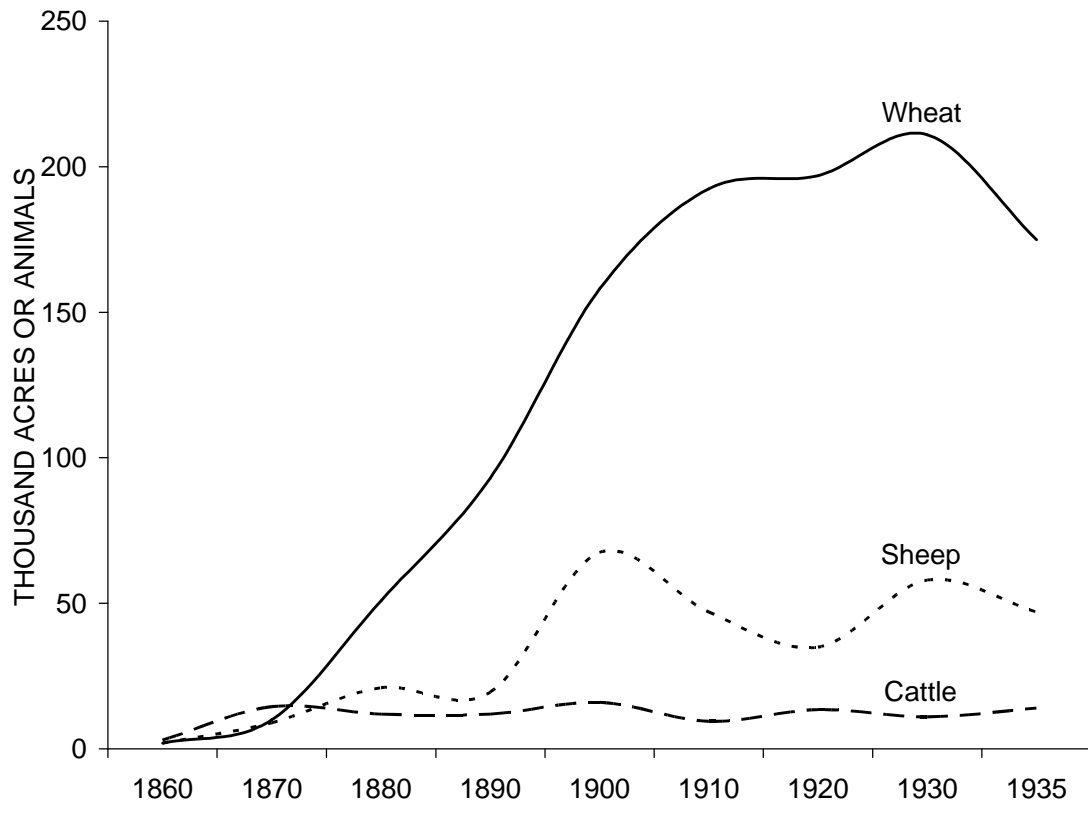
Number of domestic grazing animals, summarized for three livestock categories, for nine counties in northeastern Oregon and southeastern Washington (Asotin, Columbia and Garfield in Washington; Grant, Morrow, Umatilla, Union, Wallowa and Wheeler in Oregon). Data derived from Bureau of Census agricultural summaries published in 1895, 1902, 1913, 1922, 1927, 1932, 1942, 1946, 1952, 1956, and 1961.

When the northern Blue Mountains were first settled by emigrants, the deep loess soils supporting bunchgrass prairies were used to graze domestic livestock. But in the fall of 1863, an Oregon farmer sowed 50 acres of wheat on non-irrigated uplands near Weston, eventually harvesting an average of 35 bushels per acre in late summer of 1864. This result changed everything because it demonstrated that the loess soils were capable of producing a crop rather than just livestock feed.

The wheat farming knowledge spread quickly and by 1867, the quantity of wheat being raised near the Blue Mountains exceeded local demand, and Walla Walla, Wasco, and Umatilla counties then became known as "one of the world's great granaries".

One result of the switch to wheat farming is that Euro-American horse numbers increased dramatically between 1860 and 1900 because draft horses were needed for wheat plowing and harvesting equipment.

The following figure shows that by 1880, this new land use (wheat farming) began to dwarf livestock grazing in importance and by 1910, all local areas except those where cultivation was impractical or impossible were producing wheat. By the end of this period, most of the Pendleton plains and much of the Umatilla River lowlands were under wheat cultivation.



Historical trends for dryland wheat, cattle, and sheep production, Walla Walla County, Washington (data from USDA Soil Conservation Service 1941).

During the time period of 1912 to 1920, however, high wheat prices were stimulated by the First World War and this caused many lands previously regarded as unproductive to be brought under cultivation. When grain prices declined after the War, many of the poorer lands such as those on the Rieth anticline and the Blue Mountain slope (foothills) reverted to grazing use, or they were abandoned altogether when farm consolidation began occurring.

### Sources

- Bright, G.A. 1914.** The extensive reconnaissance of the Wenaha National Forest. Unpublished Typescript Report. [Place of publication unknown]: U.S. Department of Agriculture, Forest Service. 84 p. <http://www.fs.fed.us/r6/uma/publications/history/wenaharpt.pdf>
- Coville, F.V. 1898.** Forest growth and sheep grazing in the Cascade Mountains of Oregon. Bulletin No. 15. Washington, DC: U.S. Department of Agriculture, Division of Forestry. 54 p.
- Darlington, H.T. 1915.** A study of grazing conditions in the Wenaha National Forest. Bulletin No. 122. Pullman, WA: State College of Washington, Agricultural Experiment Station. 18 p. <http://www.fs.fed.us/r6/uma/publications/history/darlington1915.pdf>
- Daubenmire, R.F. 1940.** Plant succession due to overgrazing in the *Agropyron* bunchgrass prairie of southeastern Washington. *Ecology*. 21(1): 55-64.

- Galbraith, W.A.; Anderson, E.W. 1970.** Grazing history of the northwest. *Journal of Range Management*. 24(1): 6-12.  
<http://www.fs.fed.us/r6/uma/publications/history/galbraith%201971.pdf>
- Griffiths, D. 1903.** Forage conditions and problems in eastern Washington, eastern Oregon, northeastern California, and northwestern Nevada. Bulletin No. 38. Washington, DC: U.S. Department of Agriculture, Bureau of Plant Industry. 52 p.
- Haines, F. 1938.** The northward spread of horses among the plains Indians. *American Anthropologist*. 40: 429-437.
- Hogenson, G.M. 1964.** Geology and ground water of the Umatilla River basin, Oregon. Water-Supply Paper 1620. Washington, DC: U.S. Department of the Interior, Geological Survey. 162 p.
- Humphrey, R.R. 1943.** A history of range use and its relation to soil and water losses on the Walla Walla River watershed, Washington and Oregon. *Northwest Science*. 17: 82-87.  
<http://www.fs.fed.us/r6/uma/publications/history/history%20of%20range%20use.pdf>
- Irwin, L.L.; Cook, J.G.; Riggs, R.A.; Skovlin, J.M. 1994.** Effects of long-term grazing by big game and livestock in the Blue Mountains forest ecosystems. General Technical Report PNW-GTR-325. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 49 p.
- Langille, H.D. 1903.** The proposed Heppner Forest Reserve, Oregon. Unpublished Typescript Report. [Place of publication unknown]: U.S. Department of Agriculture, Bureau of Forestry. 32 p. <http://www.fs.fed.us/r6/uma/publications/history/Heppner1.pdf>
- Langille, H.D. 1906.** Report on the proposed Blue Mountains Forest Reserve. Unpublished Typescript Report. [Place of publication unknown]: [U.S. Department of Agriculture, Forest Service]. 40 p. <http://www.fs.fed.us/r6/uma/publications/history/Bluemtn1.pdf>
- Lomax, A.L. 1928.** History of pioneer sheep husbandry in Oregon. *The Oregon Historical Quarterly*. 29(2): 99-143.
- Minto, J. 1902.** Sheep husbandry in Oregon. *The Quarterly of the Oregon Historical Society*. 3(3): 219-247.
- Munger, T.T. 1917.** Western yellow pine in Oregon. Bulletin No. 418. Washington, DC: U.S. Department of Agriculture. 48 p.  
<http://www.fs.fed.us/r6/uma/publications/history/Munger1917.pdf>
- Oliver, C.D.; Irwin, L.L.; Knapp, W.H. 1994.** Eastside forest management practices: historical overview, extent of their applications, and their effects on sustainability of ecosystems. General Technical Report PNW-GTR-324. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 73 p.
- Tisdale, E.W. 1961.** Ecologic changes in the Palouse. *Northwest Science*. 35(4): 134-138.
- Tucker, G.J. 1940.** History of the northern Blue Mountains. Unpublished Report. Pendleton, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Region, Umatilla National Forest. 170 p. <http://www.fs.fed.us/r6/uma/publications/history/Umatilla16.pdf>

**U.S. Department of Agriculture, Soil Conservation Service. 1941.** Survey report: run-off and waterflow retardation and soil erosion prevention for flood control purposes; appendix B: watershed classification; soil, erosion, cover, infiltration survey; land use treatment plans. Unnumbered Report. Spokane, WA: U.S. Department of Agriculture, Soil Conservation Service, Region 9. 122 p.

**Victor, E. 1935.** Some effects of cultivation upon stream history and upon the topography of the Palouse region. Northwest Science. 9(3): 18-19.